

**Listing of Claims:**

This Listing of claims will replace all prior listings, and versions of the claims in the present application.

1. (Cancelled)
2. (Previously presented) The tube of claim 23, wherein said sidewall is comprised of a mixture of Type III and Type I collagen.
3. (Original) The tube of claim 2, wherein said mixture contains about 1-10% Type III collagen and about 90-99% Type I collagen.
4. (Cancelled)
5. (Previously presented) The tube of claim 23, containing a filling material comprised of Type I collagen, Type IV collagen, or a mixture thereof.
6. (Original) The tube of claim 5, wherein the filling material is comprised of collagen fibers having a substantially longitudinal orientation with respect to said tube.
7. (Original) The tube of claim 5, wherein said filling material is a mixture of Type I collagen and Type IV collagen, and wherein the Type I collagen and the Type IV collagen of said filling material is in a ratio of about 1:1 by weight.
8. (Cancelled)

9. (Original) The tube of claim 5, wherein said filling material further includes a nerve growth stimulant, nerve growth factor or a mixture thereof.

10. (Previously presented) The tube of claim 9, wherein said filling material contains laminin as a nerve growth stimulant.

11. (Previously presented) The tube of claim 23, wherein said sidewall is derived from collagen membrane tissue, and said membrane tissue is peritoneal tissue.

12. (Cancelled)

13. (Cancelled)

14. (Previously presented) The tube of claim 25, wherein said collagen membrane tissue is peritoneal membrane tissue.

15. (Previously presented) A method of producing a nerve regeneration tube as claimed in claim 23, comprising:

a) providing collagen sheet material having a compact, smooth outer barrier surface so as to inhibit cell adhesion thereon and act as a barrier to prevent passage of cells therethrough, said sheet material having a soft fibrous surface opposite the smooth barrier surface; and

b) forming said sheet material into a tube having an outer surface of said compact, smooth outer barrier surface, said tube having an inner surface of said soft fibrous surface ;

wherein said nerve regeneration tube avoids formation of scar tissue which impairs nerve healing.

16. (Previously presented) The method of claim 15, wherein said collagen sheet material has two opposite side edges, and the two side edges of said sheet material are brought together to form said tube from said sheet.

17. (Previously presented) The method of claim 16, further including a step of joining said two side edges together to form said tube from said sheet material.

18. (Cancelled)

19. (Previously presented) The method of claim 15, wherein said collagen sheet material is formed into said tube with a filling material in said tube comprised of Type I collagen, Type IV collagen or a mixture thereof.

20. (Cancelled)

21. (Cancelled)

22. (Previously presented) The nerve regeneration tube of claim 23, having a length of about 10-100mm.

23. (Previously presented) A nerve regeneration tube for reconnecting nerve ends, the tube being resorbable and having a resorbable sidewall formed with collagen sheet material having a compact smooth outer barrier surface so as to inhibit cell adhesion thereon and act as a barrier to prevent passage of cells therethrough, the sheet material further having a soft fibrous inner surface opposite the smooth barrier surface, said tube having a compact smooth outer barrier surface formed with the compact smooth outer barrier surface of said collagen sheet material so as to inhibit cell adhesion thereon and act as a barrier to prevent passage of cells

therethrough, said tube further having a soft fibrous inner surface for promoting nerve growth, said soft fibrous inner surface of said tube being formed with the soft fibrous inner surface of said collagen sheet material, said tube having an inner diameter of about 0.5-5mm, and said tube having opposite tube ends, within which tube ends, during use, are nerve ends for reconnection of said nerve ends, wherein said nerve regeneration tube avoids formation of scar tissue which impairs nerve healing.

24. (Previously presented) The tube of claim 23 wherein said tube consists essentially of a single sheet of said collagen sheet material.

25. (Previously presented) The method of claim 15 wherein said tube is formed so as to have a sidewall which consists essentially of said collagen sheet material, and said tube is formed of a single sheet of said collagen sheet material.

26. (Previously presented) A method of reconnecting nerve ends comprising providing a nerve regeneration tube for reconnecting nerve ends, the tube being resorbable and having a resorbable sidewall formed with collagen sheet material having a compact smooth outer barrier surface so as to inhibit cell adhesion thereon and act as a barrier to prevent passage of cells therethrough, the sheet material further having a soft fibrous inner surface opposite the smooth barrier surface, said tube having a compact smooth outer barrier surface formed with the compact smooth outer barrier surface of said collagen sheet material so as to inhibit cell adhesion thereon and act as a barrier to prevent passage of cells therethrough, said tube further having a soft fibrous inner surface for promoting nerve growth, said soft fibrous inner surface of said tube being formed with the soft fibrous inner surface of said collagen sheet material, said tube having an inner diameter of about 0.5-5mm, and said tube having opposite tube ends, within which said

tube ends, nerve ends are positioned for reconnection of said nerve ends, wherein said nerve regeneration tube avoids formation of scar tissue which impairs nerve healing so as to reconnect said nerve ends while avoiding formation of scar tissue which impairs nerve healing.

27. (Previously presented) The method of claim 26, wherein said sidewall is comprised of a mixture of Type III and Type I collagen.

28. (Previously presented) The method of claim 27, wherein said mixture contains about 1-10% Type III collagen and about 90-99% Type I collagen.

29. (Previously presented) The method of claim 26, wherein said tube contains a filling material comprised of Type I collagen, Type IV collagen, or a mixture thereof.

30. (Previously presented) The method of claim 29, wherein the filling material is comprised of collagen fibers having a substantially longitudinal orientation with respect to said tube.

31. (Previously presented) The method of claim 29, wherein said filling material is a mixture of Type I collagen and Type IV collagen, and wherein the Type I collagen and the Type IV collagen of said filling material is in a ratio of about 1:1 by weight.

32. (Previously presented) The method of claim 29, wherein said filling material further includes a nerve growth stimulant, nerve growth factor or a mixture thereof.

33. (Previously presented) The method of claim 26, wherein said sidewall is derived from collagen membrane tissue, and said membrane tissue is peritoneal tissue.